Please revise paragraph [0033] as follows:

The forming head 14 curls the metal strip in a helical manner so that the outer pre-formed edges of the strip ~~15~~ 40 are adjacent to each other and mesh therewith. The helically-curled strip thus takes the shape of a spiral cylinder. The adjacent, mated edges of the strip are then compressed between a support roller and a clenching roller so as to form a proper lock seam. The metal strip ~~15~~ 40 is continuously pushed by the drive rollers 42 and 44 through the forming head 14, in spiral manner, so that the spiral pipe is continuously produced with a spiral lockseam.

Please revise paragraph [0035] as follows:

Importantly, in FIGURE 1, it can be seen that the frame 30 includes a frame portion 50 that is positioned adjacent to the periphery of the forming head 14. This frame portion 50 is essential for the proper positioning of the drive rollers 42 and ~~40~~ 44. The drive rollers 42 and 44 push the metal strip 40 between the upper guide plate 46 and the lower guide plate 48 and into the support arm 52. Support arm 52 pushes down on the support roller and holds it in place. As such, the metal strip 40 will start to follow a path along the interior surface 54 of the elliptically-shaped forming head 14. As a result, the elliptically-shaped forming head 14 will create an elliptically-shaped spiral pipe, rather than the circular-shaped pipe of the prior art.

Please revise paragraph [0036] as follows:

As can be seen, the location of the frame portion 50 would create a obstruction relative to the support arm 52 and the location of the elliptically-shaped forming head 14 if the elliptically-shaped forming head 14 were of a circular configuration. The frame 50 creates an inherent barrier to the expansion of duct diameters beyond forty-eight inches in diameter. If the forming head 14 were circular, then extensions would have to be formed outwardly of the machine 12 in an inconvenient and unreliable manner. So as to accommodate the location of the frame 50, the elliptically-shaped forming head 14 is positioned so that the sharp curvature of the forming head 14 is located at the support arm 52 and on the bed of the machine 12. As a result, the sides adjacent to the frame portion 50 can extend upwardly therefrom in generally spaced relationship and non-interfering relationship with frame portion 50. The support frame 20 will maintain the elliptically-shaped forming head 14 in its desired orientation above the machine 12. As a result of the structure of the present invention, it is now possible to form circular pipe having diameters of greater than forty-eight inches. In order to determine the proper ellipse for the elliptically-shaped forming head 14, it is first necessary to understand the desired diameter of the ultimate circular pipe. Once the desired diameter is determined, then it is necessary to know the spacing between the support arm ~~22~~ 20 and the frame portion 50. As a result, a properly shaped ellipse of the elliptically-shaped forming head 14 can be calculated. As an example, if the ultimate diameter of the circular pipe is 100 inches then the elliptically-shaped forming head 14 will have a narrow diameter of 85 inches and a wide diameter of 114 inches.

Please revise paragraph [0037] as follows:

FIGURE 2 is an isolated view showing the elliptically-shaped forming head 14 of the present invention. The forming head 14 is formed of a steel material having a proper ellipse for the purposes of installation on the machine 12. The bottom end 16 of the elliptically-shaped forming head 14 should be positioned under the support arm 52. As a result, a suitable slotted area 60 should be formed at the bottom 16 so as to allow the metal strip 40 to be introduced thereinto. The metal strip 40 is free to be driven along the ~~inner~~ interior surface 54 in a continuous and spiral manner. The exterior surface 62 can be supported by the frame structures described hereinbefore.

Please revise paragraph [0038] as follows:

After the machine 12 has driven the metal strip 40 through the interior of the elliptically-shaped forming head, a length of elliptically-shaped spiral pipe will be formed. However, it is important consideration of the present invention that the ultimate goal is to produce a section of circular pipe of constant diameter. As such, the elliptically-shaped spiral pipe will need to be converted into circular pipe. FIGURE 3 shows the manner in which this conversion can occur. As can be seen in FIGURE 3, a first section 70 of spiral pipe has been positioned in a desired location. This first section 70 is of a circular configuration. The second section 72 illustrates the spiral pipe as formed by the process 10 of the present invention. Spiral pipe 72 will initially be of elliptical form. However, within the concept of the present invention, it is easy to form the elliptically-shaped spiral pipe section 72 into a circular pipe section by simply securing the end 74 of section 72 to the end 76 of section 70. Since the pipe section 72 is elliptically shaped, it can be easily manipulated, maneuvered and adjusted so as to conform with the edge of the circular spiral pipe 70. After connecting the end 74 to the end 76 by various means, such as welding, tapping, adhesive, sealants, or other means, the second pipe section ~~70~~ 72 will have its desired circular configuration. Within the concept of the present invention, although the ultimate result of the use of the elliptically-shaped forming head 14 is the creation of elliptically-shaped spiral pipe, the spiral pipe is of a configuration that can be easily manipulated for movement and configuration into a circular design of constant diameter. Fixtures and other supports can be employed so as to maintain the circular orientation of the elliptically-shaped section 72 during its installation onto the circular section 70.

Please revise paragraph [0039] as follows:

FIGURE 4 shows an alternative embodiment of the elliptically-shaped forming head 80 of the present invention. Forming head 80 has an elliptically-shaped configuration as in the previous embodiment of the forming head 14. However, a first break 82 is formed on one side of the forming head 80 and a second break 84 is formed on an opposite side of the forming head 80. These breaks ~~80~~ 84 and 82 are cuts through the wall thickness of the forming head 80. The breaks 82 and ~~82~~ 84 are particularly configured so that the forming head 80 can be manipulated for size adjustments and for producing spiral pipe of different diameters. In FIGURE 4, it can be

seen that an insert element 86 has been positioned between the edges of the break 82. Similarly, another insert element 88 has been positioned between the edges 84. As a result, the wide diameter of the elliptically-shaped forming head 80 is greater by a function of the length of the insert elements 86 and 88. Generally, each of the insert elements 86 and 88 has a U-shaped configuration in which the inner surface 90 of the insert element 86 is flush with the interior surface 92 of the forming head 80. Similarly, the inner surface 94 of the insert 88 is flush with the interior surface 92 of the forming head 80. As a result, there will be no interruption or obstruction of the travel of the metal strip during the formation of the elliptically-shaped spiral pipe. As will be described hereinafter, when the insert elements 86 and 88 are removed, the breaks 82 and 84 will be closed such that the interior surface 92 of forming head 80 is contiguous and flush with itself.

Please revise paragraph [0042] as follows:

In FIGURE 7, it can be seen how the insert element 86 has been removed. As a result, the break 82 is closed so that the edges 100 and 102 are in juxtaposition. The inside surface 92 of the forming head 80 will be continuous and flush. The first flange 104 is joined the second flange 108 through the use of bolts ~~120~~ 122. Removal of the insert element 86 will cause the maximum diameter of the elliptically-shaped forming head 80 to be reduced in size. If it is necessary to make minor adjustments in the diameter in the forming head 80, then the insert elements 86 and 88 can be suitably employed. As a result, the present invention eliminates the need for constantly scrapping, reforming or otherwise taking other expensive measures for the remedying of diameter discrepancies in the elliptically-shaped spiral pipe.

forming process. This ductwork is often used for the passing of ventilation, air conditioning and heating within a building or a very large vehicle. The forming rollers associated with the forming head are positioned adjacent to an outwardly extending frame portion. As such, the maximum diameter of forming head that can be accommodated in such machines must be less than seventy-eight inches in diameter. If the spiral pipe is of oversized diameter, then other techniques are required for the creation of such large diameter ductwork. Conventionally, when such oversized ductwork is required in a particular project, the oversize ductwork is not formed through the use of the Spiral-Helix machine, but rather through complicated seam welding processes. In other words, the large circular portion of the ductwork are formed on a roll forming machine. Each of these circular sections is then joined and welded together in end-to-end relationship. This process of forming such oversized circular pipe is extremely expensive, requires a great deal of manpower, and is relatively inefficient. Unfortunately, none of the existing machines have the capability of creating such large diameter spiral pipe. Inevitably, if a forming head of such diameter were utilized on the Spiral-Helix machine, then the edges of the circular forming head would contact the frame portions of the machine and prevent adaptation and use thereof. As such, a need has developed so as to create a forming head by which such large oversize diameter spiral pipes can be formed by using such Spiral-Helix machines. Additionally, there is a need in the art to provide the ability to create such oversize ductwork through the use of a spiral forming process rather than seam welding and roll forming.

[0009] The requirements to manufacture such large oversize diameter ductwork are particularly important in view of the expanding market for such oversize ducts. Larger athletic facilities are being created throughout the world. These athletic facilities often require the transport of air